



Laser Power Sensors

# Position Sensing Air-Cooled Thermopile Sensors to 200 W

## Low- to Medium-Power Pulsed and CW Lasers from 10 mW to 200 W

These unique position sensing thermopiles display the position of the incident beam on the sensor disk, in addition to measuring power when used with the LabMax and LabMax-Pro meters. This information allows the user to safely and precisely align the sensor and the beam being measured. This is particularly useful for non-visible beams.

These air-cooled, surface absorbing sensors are intended for measurement of low to medium power pulsed and CW lasers from the 10 mW to 100 W power range. Convection cooling makes them simple to operate as well as mechanically compact.



### FEATURES

- 10 mW to 200 W range
- Broadband coatings
- 0.25 to 10.6  $\mu\text{m}$  spectral range
- Convective air-cooled

### APPLICATIONS

- Medical
- Scientific
- Industrial
- General Laser Power Measurement to 200 W

# Position Sensing Air-Cooled Thermopile Sensors to 200 W

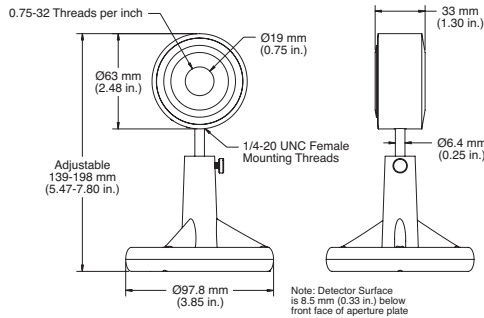
Specifications	LM-3	LM-10	LM-45
Wavelength Range ( $\mu\text{m}$ )	0.25 to 10.6		
Power Range	10 mW to 3 W	10 mW to 10 W	100 mW to 25 W
Maximum Intermittent Power (W) (<5 min.)	10	12	45
Long-Pulse Joules Range (J)	0.5 to 10		
Resolution (mW)	1	1	10
Maximum Power Density ( $\text{kW}/\text{cm}^2$ )	6		
Maximum Energy Density ( $\text{mJ}/\text{cm}^2$ )	600 (10 ns, 1064 nm)		
Detector Coating	Broadband		
Detector Diameter (mm)	19	16	19
Calibration Uncertainty (%) ( $k=2$ )	$\pm 2$		
Calibration Wavelength (nm)	10,600		
Cooling Method	Air		
Cable Type	LM DB-25		
Cable Length (m)	1.8		
Part Number	1098328 <sup>1</sup>	1098304 <sup>1</sup>	1098320 <sup>1</sup>

Notes:

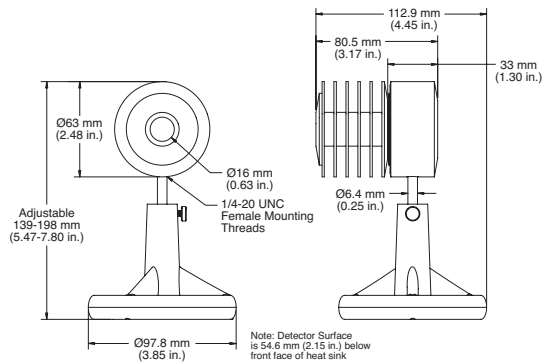
1. C24 Quick Ship program: eligible for next business day shipment.

## Mechanical Specifications

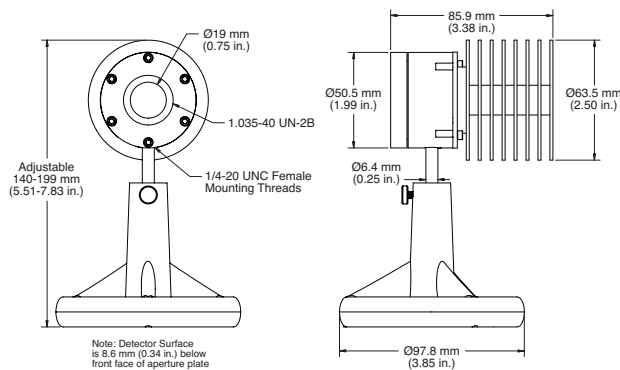
LM-3



LM-10



LM-45



# Position Sensing Air-Cooled Thermopile Sensors to 200 W

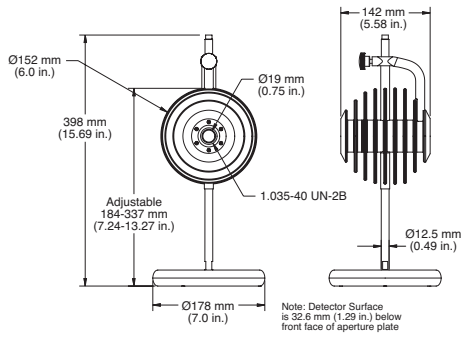
Specifications	LM-100	LM-200
Wavelength Range ( $\mu\text{m}$ )	0.25 to 10.6	
Power Range	100 mW to 100 W	100 mW to 200 W
Long-Pulse Joules Range (J)	0.5 to 10	
Resolution (mW)	10	
Maximum Power Density ( $\text{kW}/\text{cm}^2$ )	6	
Maximum Energy Density ( $\text{mJ}/\text{cm}^2$ )	600 (10 ns, 1064 nm)	
Detector Coating	Broadband	
Detector Diameter (mm)	19	
Calibration Uncertainty (%) (k=2)	$\pm 2$	$\pm 5$
Calibration Wavelength (nm)	10,600	
Cooling Method	Air	Fan
Cable Type	LM DB-25	
Cable Length (m)	1.8	
Part Number	1098346	2290159 (12V DC) <sup>1</sup>

Notes:

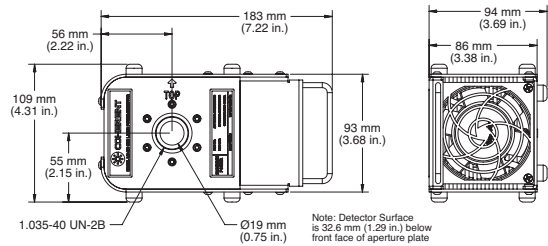
1. 12 VDC power supply and cord included.

## Mechanical Specifications

LM-100



LM-200





## Position Sensing Air-Cooled Thermopile Sensors to 200 W

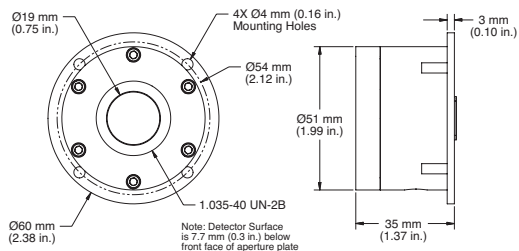
Specifications	LM-20	LM-150 LS	LM-150 FS
Wavelength Range ( $\mu\text{m}$ )	0.25 to 10.6		
Power Range	100 mW to 20 W	100 mW to 150 W	100 mW to 150 W
Long-Pulse Joules Range (J)	0.5 to 10		
Resolution (mW)	10		
Maximum Power Density ( $\text{kW}/\text{cm}^2$ )	6		
Maximum Energy Density ( $\text{mJ}/\text{cm}^2$ )	600 (10 ns, 1064 nm)		
Detector Coating	Broadband		
Detector Diameter (mm)	19		
Calibration Uncertainty (%) (k=2)	$\pm 2$	$\pm 5$	$\pm 5$
Calibration Wavelength (nm)	10,600		
Cooling Method	Conductive	Air	Air
Cable Type	LM DB-25		
Cable Length (m)	1.8		
Part Number	1098456	1098452	1098394

Notes:

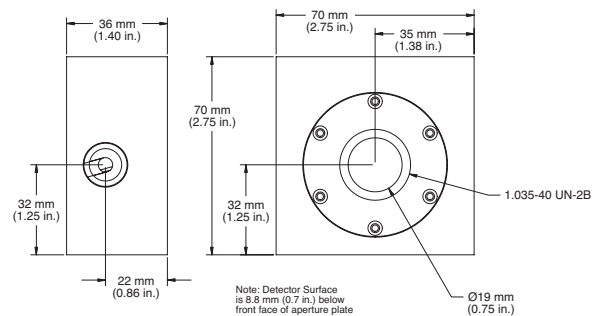
1. C24 Quick Ship program: eligible for next business day shipment.

### Mechanical Specifications

LM-20



LM-150 LS



LM-150 FS

